

REMARKS/ARGUMENTS

A. In the Specification

1. *Regarding the ABSTRACT OF THE DISCLOSURE*

The Abstract has been amended to improve the flow of language and to conform with the proper language and format for an abstract. As amended the Abstract now includes only approximately 148 words. No new matter has been added.

Additionally, in the specification, three separate paragraphs have been amended to improve the flow of language and/or correct syntax. No new matter has been added.

B. In the Claims

Claims 1-14 and 16-28 remain in this application. Claim 15 has been restricted out. Claims 1, 3, 4, 5, 8, 10, 11, 13, 16, 18, 19, 20, 23, 25, and 26 have been amended to avoid the cited prior art of record. Dependent claims 9, 14, 24, and 28 remain as originally filed. Claims 2, 6, 7, 12, 17, 21, 22, and 27 have been canceled. No new claims have been added.

Regarding the Claim Rejections under 35 U.S.C. 103(a)

1. Claims 1-3, 6-10, 13, 14, 16-18, 21-25, and 28 have been rejected under 35 U.S.C. 103(a), as being unpatentable over U.S. Patent No. 4,593,647 to Sorgeloos ("Sorgeloos") in view of U.S. Patent No. 4,086,875 to Lindbergh ("Lindbergh") and in view of U.S. Patent No. 6,117,313 to Goldman ("Goldman"). Applicant respectfully disagrees with this obviousness rejection in light of the above listed amendments made to the claims at issue herein.

The present invention is directed to a bony fish production tank system incorporating a unique configuration, that having a walled off central zone for housing various subsystems critical to the fish rearing environment, and a unique fish sizing, moving, separating, restocking and

harvesting component, as well as a unique dead and dying fish removal “hydrocone” subsystem. One of the most important aspects of the present invention is that it is readily scalable to huge volumes, and thereby, much greater bony fish crop production when compared to the conventional round tank rearing tanks. In this regard, the present invention represents a major breakthrough in large scale production of fish crops in the most economical and efficient fashion.

Sorgeloos is directed to the aquaculture of *Artemia sp.* or brine shrimp. This system has no walled off inner portion for housing critical subsystems, no fish crop moving, sizing, restocking and/or harvesting means (interconnecting channels), and certainly no means for effectively removing dead and/or dying fish which may contaminate the growing fish crop. The Sorgeloos system is not built to be scalable to huge volumes, cannot be used to rear bony fishes, and certainly does not make obvious all of the refinements and special features as claimed in the instant application.

The present invention allows for sizing, restocking of adjacent tanks, and harvesting of fish crops in a novel and unique fashion. The concept of the grading/harvest channel is new and not made obvious by the teaching of Sorgeloos, even in view of Lindbergh. With the present invention is possible to size, grade, and separate fish by the mere positioning (not movement of) specially placed panels. The grading/harvest channel then allows for passive movement of fish crop out of the containment growing tanks to a grade area or transfer to another tank, and all without the fish ever leaving the water environment they were grown in. In contrast, Lindbergh is designed for net pens, that is, open ocean or open water nets. This fish grading device is actively moved within fish net pens. This is a very different application, as there is no movement of fish to a side channel for restocking and/or harvesting operations. The Lindbergh technique would not work with the Sorgeloos system as Sorgeloos does not teach or even suggest a side channel linking separate rearing tanks for the purpose of underwater restocking.

The present inventions discloses and claims a passive dead and dying fish removal

subsystem that is effective whether the morbidity fish (those diseased and dying) and the mortality fish (those long dead) are floating or have sunk to the bottom of the tank. It is truly passive (using the water current alone) and requires no further input of energy, such as special task directed pumping, or expensive manual labor (netting). In contrast, Goldman teaches an active dead fish removal system which is only effective after the long dead fish sinks to the bottom of the tank. Goldman requires centrifugal force, and more importantly, additional pumping power. As a result, Goldman's pumping technique would not fit well within the system of Sorgeloos, is not readily scalable, and would neither be economical nor efficient if applied to large production batches.

Therefore, as amended, Applicant earnestly believes that claims 1 and 16 are patentably distinguishable from Sorgeloos, in view of Lindbergh and in view of Goldman. The teachings of Sorgeloos alone, or in combination with either Lindbergh alone, or Lindbergh and Goldman combined do not in any way disclose, claim, teach, suggest or intimate the novel features of the present invention.

In view of the above, Applicant submits that independent claims 1 (system) and 16 (method) are novel and non-obvious over the cited references and requests removal of this 103(a) rejection. In this respect, Applicant avers that all of the dependent claims of claim 1 and 16, currently as filed, and/or amended herein, are also novel and non-obvious over the prior art cited.

2. Claims 2 and 17 have been rejected under 35 U.S.C. 103(a), as being unpatentable over Sorgeloos in view of Goldman. Claims 2 and 17 have been canceled.

3. Claims 3 and 18 have been rejected under 35 U.S.C. 103(a), as being unpatentable over Sorgeloos in view of the "teachings at the time of invention." Claim 3 and claim 18 have been

amended to more specifically point out the novelty and non-obviousness of the present invention. As claim 3 is dependent on claim 1, Applicant believes that claim 3 is now in condition for allowance in light of the amendment to claim 1. As claim 18 is dependent on claim 16, Applicant believes that claim 18 is now in condition for allowance in light of the amendment to claim 16.

4. Claims 6, 7, 21 and 22 have been rejected under 35 U.S.C. 103(a), as being unpatentable over Sorgeloos in view of Goldman. Claims 6, 7, 21, and 22 have been canceled.

5. Claims 8 and 23 have been rejected under 35 U.S.C. 103(a), as being unpatentable over Sorgeloos in view of the "teachings at the time of invention." Claims 8 and 23 have been amended to more distinguish the non-obvious features of the present invention. Both claims are dependent on base claims, which have also been amended, and which Applicant believes are now in condition for allowance. Therefore, as amended, claims 8 and 23 should be allowable.

6. Claims 9 and 24 have been rejected under 35 U.S.C. 103(a), as being unpatentable over Sorgeloos in view of Goldman. Claims 9 and 24 have not been amended and remain in their original form as filed. However, claims 9 and 24 are dependent on base claims which Applicant believes are now allowable based upon the amendments made to said base claims. Therefore, Applicant believes that claims 9 and 24 should be allowable.

7. Claims 13 and 28 have been rejected under 35 U.S.C. 103(a), as being unpatentable over Sorgeloos in view of Goldman. Claim 13 has been amended and claim 28 remains as originally filed. Both claims 13 and 28 depend from base claims which have been amended to

avoid the prior art. As Applicant now believes that the base claims, namely, claims 1 and 16 are now in condition for allowance, Applicant also believes that claim 13 and 28 are now also in condition for allowance.

8. Claim 14 has been rejected under 35 U.S.C. 103(a), as being unpatentable over Sorgeloos alone. Claim 14 remains as originally filed, however its base claim, namely, claim 1, has been amended herein. Applicant now believes that since claim 1 is allowable, claim 14 should also be allowable.

9. Claims 11 and 26 have been rejected under 35 U.S.C. 103(a), as being unpatentable over Sorgeloos in view of Lindbergh and Goldman as applied to claim 2 above, and further in view of U. S. Patent No. 5,820,759 to Stewart et al. ("Stewart"). Claims 11 and 26 have been amended herein. Also, claims 1 and 16, the base claims from which claims 11 and 26 depend, have been amended to avoid the prior art cited. In this regard, Applicant now believes that dependent claims 11 and 26 should be allowable in this application.

10. Claims 11 and 26 have been further rejected under 35 U.S.C. 103(a), as being unpatentable over Sorgeloos in view of Stewart. See above.

11. Claims 12 and 27 have been rejected under 35 U.S.C. 103(a), as being unpatentable over Sorgeloos in view of Lindbergh and Goldman as applied to claim 1 above, and further in view of U. S. Patent No. 5,320,068 to Redditt ("Redditt"). In this regard, claims 12 and 27 have been canceled from this application.

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12. Claims 12 and 27 have been further rejected under 35 U.S.C. 103(a), as being unpatentable over Sorgeloos in view of Redditt. As stated above, claims 12 and 27 have been canceled from this application.

ALLOWABLE SUBJECT MATTER

Claims 4, 5, 19 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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CONCLUSION


All of the objections and rejections raised by the Examiner have been addressed by Applicant. In view of the amendments and the remarks submitted herein, Applicant submits that all of the claims of record are now in condition for allowance and respectfully requests that a Notice of Allowance be issued in this case, in due course.

If it is felt for any reason that direct communication with Applicant's attorney would serve to advance prosecution of this application to allowance, the Examiner is invited to contact the undersigned, attorney of record in this case, Richard D. Clarke, Esq., at one of the listed below numbers or at his below listed e-mail address.

Dated: December 4, 2004

Respectfully submitted,

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